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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,770	02/28/2005	Shigeru Shirai	P26896	9878
7055 7590 03/10/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER LE, HUYEN D	
			ART UNIT 3751	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/525,770	Applicant(s) SHIRAI ET AL.	
	Examiner Huyen Le	Art Unit 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8,31,32 and 34-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8,31-32,34-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/17/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification, *as disclosed for the elected embodiment*, is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: “*the heating system comprising a heat exchanger...the nozzle cleaner being configured to spray the washing water, heated by the heating system, in a form of at least one of high-temperature water and vapor*” as recited in claim 1.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “the first heating device having a snake internal flow path” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim 1 recites "*heating system comprising a heat exchanger...the nozzle cleaner being configured to spray the washing water , heated by the heating system, in a form of at least one of high-temperature water and vapor*". As disclosed in the original specification, on pages 25-26, the heating system is a heater exchanger 11. The washing water is heated by the heater exchanger 11 (warm water unit) in a form of "warm water". The heat exchanger 11 includes an internal flow path which snakes. The heat exchanger 11 is a very efficient warm water device. The heating system 11 does not heat the washing water to high temperature. The instantaneous heating device 33, located in the nozzle cleaner, is used to change the "warm water" into a form of high-temperature water. Since such claimed subject matter was not described in original the specification (***especially pages 1-36 that discloses the elected embodiment***) in such

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a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, the claimed subject matter constitutes new matter.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 3-5, 8, 31, 32 and 34-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Amended claim 1 recites "*heating system comprising a heat exchanger...the nozzle cleaner being configured to spray the washing water , heated by the heating system, in a form of at least one of high-temperature water and vapor*". Such recitation renders the claim indefinite since it does not have detailed support in the present specification (***especially pages 1-36 that discloses the elected embodiment***). Since the claim does not clearly set forth the metes and bounds of the patent protection desired, the scope of the claim is unascertainable. Claims 3-5, 8, 31, 32 and 34-37 depend from claim 1 and are likewise indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 8 and 37 (as presently and best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama et al. (JP 2001-152517).

Regarding claims 1 and 37, the Maruyama et al. reference discloses a sanitary washing apparatus (Fig. 1). The apparatus comprises a heating system (6,6a) configured to heat washing water, the heating system comprising a heat exchanger (6) having an flow path (around a coil 6a inside tank 6) constituting a “snaking” internal flow path. The apparatus also includes a human body washing nozzle device (at 3,4) having a discharge port (located in the nozzle) that discharges washing water, heated by the heating system, so as to wash the human body, and a nozzle cleaner (30) having a spray port (see Fig. 1) and positioned externally of the human body washing nozzle, wherein the nozzle cleaner is configured to spray washing water, heated by the heating system, in a form of a relatively high-temperature water from the spray port onto the at least an outer surface of the discharge port of the human body washing nozzle so as to sterilize at least the outer surface of the human body washing nozzle adjacent the discharge port by high-temperature cleaning, wherein at least part of a surface of the washing nozzle is inherently subjected to water repellent processing. The apparatus also includes a switching valve (at 5) configured to selectively feed the washing water heated by the (first) heating system to the washing nozzle or the nozzle cleaner.

Regarding claim 8, as schematically shown in Fig. 1, wherein the human washing nozzle comprises a plurality of nozzles (3,4) that respectively discharge the washing water, and the spray port of the nozzle cleaner is provided so as to simultaneously clean the plurality of nozzles.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (as discussed supra).

Regarding claim 3, even though the Maruyama et al. reference does not specifically disclose that the heated washing water having a flow rate of not less than 0.3 liters per minute as claimed, it, however, would have been obvious to one of ordinary skill in the art to employ such flow rate for the heated washing water since discovering an optimum value for flow rate of heated washing water involves only routine skill in the art.

Regarding claim 4, even though the Maruyama et al. reference does not specifically disclose that the high-temperature water having a temperature of not less than 55 degrees C as claimed, it, however, would have been obvious to one of ordinary skill in the art to employ such degrees C for the high-temperature water since discovering an optimum value for degrees C of heated wash water to effectively sanitize a washing nozzle involves only routine skill in the art.

Regarding claim 5, even though the Maruyama et al. reference does not specifically disclose that the high-temperature water having a temperature of more less than 100 degrees C as claimed, it, however, would have been obvious to one of

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ordinary skill in the art to employ such degrees C for the high-temperature water since discovering an optimum value for degrees C of heated wash water to prevent scalding involves only routine skill in the art.

11. Claims 31, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (as discussed supra) in view of Shigeru et al. (JP2000-213038).

Even though the Maruyama et al. reference does not specifically include a washing instruction unit with a remote control as claimed, attention, however, is directed to the Shigeru et al. reference which discloses a similar sanitary washing apparatus having a washing instruction unit (at 13,14 in Shigeru et al.), wherein the washing instruction unit includes a remote control device (constituted by the sensor 37) that issues an instruction or signal to begin the washing operation, wherein the nozzle cleaner inherently starts the cleaning operation for each predetermined time interval. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Maruyama et al. reference by employing a washing instruction unit with a remote control, in view of the teaching of Shigeru et al., in order to automatically control the functions of the washing operation based on the user's needs.

12. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (as discussed supra) in view of Sato et al. (2004-0019962).

The Maruyama et al. reference DIFFERS in that it does not specifically disclose that the washing nozzle is formed of a stainless steel material as claimed. Attention, however, is directed to the Sato et al. reference which discloses another sanitary

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washing apparatus having a washing nozzle made from a stainless steel material (paragraph [0243]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Maruyama et al. apparatus by employing a washing nozzle formed of stainless steel, in view of the teaching of Sato et al., in order to provide minimize surface roughness. Furthermore, it is generally known that stainless steel material is a heat-resistant material.

13. Claims 38-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al. (as discussed supra) in view of Shigeru et al. (2000-213038).

Regarding claims 38 and 45, the Maruyama et al. reference discloses a sanitary washing apparatus having substantially all features as claimed (as discussed supra). The Maruyama et al. reference DIFFERS in that it does not specifically include an instantaneous heating device as claimed. Attention, however, is directed to the Shigeru et al. reference which discloses a similar sanitary washing apparatus. The apparatus includes a human body washing nozzle device (50) having a discharge port (located in the head 50) that discharges washing water for washing the human body, and an instantaneous heating device (at 28, also paragraph [0017]) that heats and sterilizes the washing water as it flows from the inlet to the outlet of the instantaneous heating device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Maruyama et al. reference by employing an instantaneous heating device in view of the teaching of Shigeru et al to heat and remove the residual water in the nozzle cleaner and to prevent the propagation of bacteria in the nozzle cleaner.

Regarding claim 39, even though the modified Maruyama et al. reference does not specifically disclose that the heated wash water having a flow rate of not less than 0.3 liters per minute as claimed, it, however, would have been obvious to one of ordinary skill in the art to employ such flow rate for the heated wash water since discovering an optimum value for flow rate of heated wash water involves only routine skill in the art.

Regarding claim 40, even though the modified Maruyama et al. reference does not specifically disclose that the heated wash water having a temperature of not less than 55 degrees C as claimed, it, however, would have been obvious to one of ordinary skill in the art to employ such degrees C for the heated wash water since discovering an optimum value for degrees C of heated wash water to effectively sanitize a washing nozzle involves only routine skill in the art.

Regarding claim 41, even though the modified Maruyama et al. reference does not specifically disclose that the heated wash water having a temperature of more less than 100 degrees C as claimed, it, however, would have been obvious to one of ordinary skill in the art to employ such degrees C for the heated wash water since discovering an optimum value for degrees C of heated wash water to prevent scalding involves only routine skill in the art.

Regarding claim 42, as schematically shown in Fig. 1 of Maruyama et al., wherein the human washing nozzle comprises a plurality of nozzles (3,4) that respectively discharge the washing water, and the spray port of the nozzle cleaner is provided so as to simultaneously clean the plurality of nozzles.

Regarding claim 43, the modified Maruyama et al. reference also discloses a washing instruction unit (at 13,14 in Shigeru et al.), wherein the washing instruction unit includes a remote control device (constituted by the sensor 37) that issues an instruction or signal to begin the washing operation, wherein the nozzle cleaner inherently starts the cleaning operation for each predetermined time interval.

14. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Maruyama et al. (as discussed supra) in view of Sato et al. (2004-0019962).

The modified Maruyama et al. reference DIFFERS in that it does not specifically disclose that the washing nozzle comprising a heat-resistant material as claimed. Attention, however, is directed to the Sato et al. reference which discloses another sanitary washing apparatus having a washing nozzle made from a stainless steel material (paragraph [0243]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the modified Maruyama et al. apparatus by employing a washing nozzle formed of stainless steel, in view of the teaching of Sato et al., in order to provide minimize surface roughness. Furthermore, it is generally known that stainless steel material is a heat-resistant material.

Response to Arguments

15. Applicants' arguments filed on 10/21/2008 with respect to the pending claims have been fully considered. However, they are deemed not persuasive.

Applicants submit that the last paragraph beginning on page 5 of the specification provides adequate support the claimed feature "*heating system comprising*

a heat exchanger...the nozzle cleaner being configured to spray the washing water , heated by the heating system, in a form of at least one of high-temperature water and vapor". See remarks section, pages 9-10. Nevertheless, the disclosure on page 5 shows the temperatures of the heated washing water (e.g. not less than 55 degrees C or not more than 100 degrees C) and the washing nozzle device may be cleaned by vapor or exposed to high-temperature vapor. The disclosure fails to describe the heating system 11 (heating exchanger) heating the washing water in form of high-temperature water or vapor. Applicants' arguments with respect to the 112 rejections are discussed supra.

Applicants submit that MAKUYANIA does not disclose the claimed heat exchanger having a snaking internal flow path. Examiner disagrees with applicants. Since Fig. 3 of the present application depicts the claimed heat exchanger 11 having a heating coil in a reservoir and does not show any other specific structures, the claimed heat exchanger is met by the heat exchanger 6 shown in Fig. 1 of MAKUYANIA. The heater exchanger 6 has a snaking (around the coil 6a) internal flow.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is 571-272-4890. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huyen Le/

Primary Examiner, Art Unit 3751